

REMARKS

The Applicants appreciate the continuing thorough examination of the present application that is reflected in the Office Action. Applicants have thoroughly considered the newly cited prior art references and have extensively amended the pending claims to clarify their independent bases for patentability over those references. Reconsideration and allowance of the pending claims is requested in view of above-amendments and for at least the reasons that will now be explained.

Amended Independent Claims 1, 19, and 37 Are Not Anticipated By Network Working Group, RFC 1349 by Almquist et al (July 1992):

The Office Action has rejected Claims 1-4, 6, 12, and 13-15 under 35 U.S.C. Sec. 102(b) as allegedly anticipated by Network Working Group, RFC 1349 by Almquist et al (July 1992) ("RFC 1349"). Claim 1 has been amended to recite:

1. A method of providing improved quality of service over a series of messages exchanged between computers in a networking environment that are related to a transaction, comprising:

determining one or more transactional quality of service ("TQoS") values to be applied to the related messages;

using the determined TQoS values when transmitting at least one of the related messages from a server computer to a client computer as a response message related to a request message from the client computer;

annotating a routing token of the response message with information reflecting the determined TQoS values;

transmitting the response message with the annotated routing token with the information reflecting the determined TQoS values from the server computer to the client computer;

receiving the response message transmitted with the annotated routing token at the client computer; and

transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server.

Amended Claim 1 now recites that a server annotates the routing token of a response message with determined TQoS values and transmits the annotated response message to a client in response to a request message from the client. The client receives the annotated response message and then transmits the TQoS values from the client back to the server with subsequent request messages which are each related to the response message from the server.

Although RFC 1349 describes that messages are routed through a network based on a Type of Service (TOS) value associated with the messages, in sharp contrast to Claim 1, RFC 1349 specifies that "applications are responsible for choosing appropriate TOS values for any traffic they originate." (RFC 1349, section 5.3, emphasis added). Accordingly, if a server computer and a client computer were to operate in compliance with RFC 1349, they would each separately and independently choose particular TOS values for traffic messages that they each originate to the network. RFC 1349 further emphasizes that there "is no requirement that both ends of a transport connection use the same TOS", which further emphasizes the independence of the server computer and client computer's TOS value choices. (RFC 1349, section 5.2). Applicants note that although sections 3 and 7.2 of RFC 1349 describe forwarding TOS as part of a "datagram", those datagrams are used by network routers to select particular paths through the network between "both ends of a transport connection."

Applicants submit that nowhere does RFC 1349 describe that in response to a request from a client, that a server annotates a routing token with a TQoS value and transmits the annotated routing token back to the client. Moreover, RFC 1349 does not describe that in response to the client receiving the annotated routing token from the server, that the client would then return the TQoS value, determined from the annotated routing token, back to the server with subsequent request messages that are each related to the earlier response message from the server.

For at least the reasons set forth above, Applicants submit that RFC 1349 does not disclose many recitations of amended Claim 1 and, therefore, that Claim 1 is not anticipated by RFC 1349. Independent Claims 19 and 37 have been amended to include recitations which are similar to that of Claim 1, and are submitted to also not be anticipated by RFC 1349 for at least the reasons set forth above for Claim 1.

The dependent claims are patentable at least per the patentability of the independent claims from which they depend. Moreover, these claims are submitted to provide further independent bases for patentability for at least the reasons that are explained below.

For example, dependent Claim 34 recites:

34. The system according to claim 19, wherein:
the TQoS values comprise at least (1) a transmission priority value to be used
when transmitting the response messages with the annotated routing token and (2)
available bandwidth information pertaining to a network connection to the client
computer;

at least one of the response messages transmitted with the annotated routing
token is a response that serves a Web object to the client computer from a network
cache; and

the means for using the determined TQoS values further comprises means for
using the determined TQoS values, by the network cache, to prioritize transmission of
the response that serves the Web object and to enforce bandwidth allocation using the
available bandwidth information as the response is transmitted.

Accordingly, the TQoS values include available bandwidth information pertaining to
a network connection to the client computer, and the system includes means for using the
determined TQoS values to enforce bandwidth allocation using the available bandwidth
information as the response is transmitted. The Office Action cites to RFC 1349 pages 4-5
and 10-12 as basis to reject Claim 34. However, Applicants submit that neither the cited
sections of RFC 1349, nor elsewhere, does RFC 1349 disclose annotation of a routing token
with available bandwidth information, or enforcing bandwidth allocation as recited by Claim
34. If the rejection of Claim 34 is maintained, then Applicants request that the Examiner
point out with more specificity where RFC 1349 is alleged to disclose the recitations of
Claim 34.

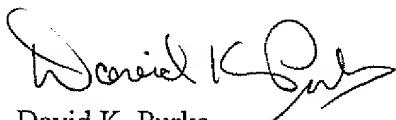
Dependent Claim 46 includes similar recitations Claim 34 and is therefore submitted
to be patentable over RFC 1349 for at least the reasons explained for Claim 34.

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Filed: April 3, 2001
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CONCLUSION

In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,



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